



## **ABSTRACT**

Septage Management - Operative Guidelines for Septage Management for Urban and Rural Local Bodies in Tamil Nadu - Approved - Orders - Issued.

Municipal Administration & Water Supply (MA. 3) Department.

G.O.(Ms) No. 106.

Dated : 01.09.2014

Read:

From the Commissioner of Municipal Administration Letter  
Roc. No. 47718/2013/UGSS-2, dated 31.07.2014.

### **ORDER:**

Sanitation is one of the important works of the Urban Local Bodies. However due to absence of Under Ground Sewerage Scheme in many of the Local Bodies in the State, untreated sewage and waste is disposed on unscientifically, resulting in large scale population and environmental degradation. Vision 2023 of the Hon'ble Chief Minister envisages to ensure that all have access to safe sanitation including open defecation free and garbage free environment which includes the implementation of underground sewerage scheme and waste water Treatment Plants across local bodies in order to provide better sanitation facilities.

2) The Commissioner of Municipal Administration, in his letter read above, has stated that adequate attention needs to be given to septic tank design, operation and even to collection of sewage from their tanks, their transportation and processing and he has prepared a draft Operative Guidelines on Septage Management, which can regulate periodical cleaning of septic tanks, Transport, Treatment, Re-use and scientific disposal.

3) The Commissioner of Municipal Administration has requested the Government to issue orders to implement the Operative Guidelines for Septage Management in Urban and Rural Local Bodies in Tamil Nadu.

4) The Government, after careful examination of the above proposal, approve the Operative Guidelines for Septage Management in Urban Local Bodies and Rural Local Bodies in Tamil Nadu. The Operative Guidelines for Septage Management is annexed to this order.

5) The Principal Secretary/Commissioner, Corporation of Chennai, Commissioner of Municipal Administration, Director of Town Panchayats and the Director of Rural Development & Panchayat Raj are requested to strictly follow the above guidelines and communicate the guidelines to the concerned officials under their control.

(By Order of the Governor)

K. PHANINDRA REDDY,  
PRINCIPAL SECRETARY TO GOVERNMENT

To

The Principal Secretary/Commissioner, Corporation of Chennai,  
Chennai - 3 (with enclosure)

The Commissioner of Municipal Administration,  
Chennai - 5 (with enclosure)

✓ The Director of Town Panchayats,  
Chennai - 108 (with enclosure)

The Director of Rural Development &  
Panchayat Raj, Chennai - 15 (with enclosure)

The Principal Secretary to Government,  
Rural Development & Panchayat Raj Department,  
Chennai - 9 (with enclosure)

The Principal Secretary to Government,  
Agriculture Department, Chennai - 9 (with enclosure)

The Secretary to Government,  
Health & Family Welfare Department,  
Chennai - 9 (with enclosure)

The Principal Secretary to Government,  
Transport Department, Chennai - 9 (with enclosure)

The Managing Director, Tamil Nadu Water Supply &  
Drainage Board, Chennai - 5 (with enclosure)

The Managing Director, Chennai Metro Water Supply &  
Sewage Board, Chennai - 2 (with enclosure)

The Chairman & Managing Director, Tamil Nadu Urban  
Infrastructure Financial Services Limited,  
Chennai - 17 (with enclosure)

The Chairman & Managing Director, Tamil Nadu Urban Finance &  
Infrastructure Development Corporation Limited,  
Chennai - 35 (with enclosure)

**Copy to**

The Senior Personal Assistant to Hon'ble Minister (MA, RD, Law,  
Cts. & Pri.), Chennai - 9 (with enclosure)

The Municipal Administration & Water Supply (MA.II/MA-IV/  
MC-I/MC-II/MC-VI/MW/WS.I/WS.II/WS.III/WS.IV/TP.II/  
OP.II) Department, Chennai - 9 (with enclosure)

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// Forwarded By Order//

*N. Shainab*  
2.9.2014  
SECTION OFFICER.

**ANNEXURE TO G.O. (Ms) No. 106, MA&WS, dated 01.09.2014.**

**OPERATIVE GUIDELINES FOR SEPTAGE MANAGEMENT FOR  
LOCAL BODIES IN TAMIL NADU**

**Table of Contents**

1. Introduction.....	2
1.1 Current Scenario in Tamil Nadu.....	2
1.2 The Need for Decentralized Septage Management system in Tamil Nadu.....	3
2. Operative Guidelines for Local Bodies for effective implementation of Septage Management.....	4
I. Design and Construction of Septic Tanks.....	4
II. Pumping and De-Sludging.....	5
III. Septage Transportation.....	5
IV. Treatment & Final Disposal.....	5
V. Information, Education and Communication.....	6
VI. Fees/Charges for De-Sludging, Transportation and Treatment.....	6
VII. Record Keeping and Reporting through MIS.....	7
3. Deliverables for the Local Bodies in the next six months effective from June 2014.....	8
Annexure 1: Septic Tank Design.....	13
Annexure 2: Clusters.....	15
Annexure 3: Sample Septage Transporter Permit.....	16
Annexure 4: Collection and Transport Records.....	17
Annexure 5: Sample Survey for Identifying Locations of Sullage Water.....	18
Annexure 6: Sample House Hold Survey for Identifying Septic Tanks, etc.....	19
Annexure 7: Decant Facility Design.....	20

**Glossary of Terms**

<b>ULB</b>	Urban Local Body / Urban Local Bodies
<b>TNUDP</b>	Tamil Nadu Urban Development Project
<b>NRCP</b>	National River Conservation Programme
<b>NTADCL</b>	New Tiruppur Area Development Corporation Limited
<b>UGSS</b>	Underground Sewerage System
<b>STP</b>	Sewerage Treatment Plant
<b>MLD</b>	Million Liters per Day
<b>MIS</b>	Management Information System
<b>IEC</b>	Information, Education and Communication
<b>GIS</b>	Geographical Information System
<b>TP</b>	Town Panchayat
<b>VP</b>	Village Panchayat
<b>CPHEEO</b>	Central Public Health and Environmental Engineering Organisation
<b>TNIUS</b>	Tamil Nadu Institute of Urban Studies

## 1. Introduction

The partially treated sewage that is stored in a septic tank is commonly called as Septage. It includes the liquids, solids (sludge), as well as the fats, oils and grease (scum) that accumulate in septic tanks over time. Septage management includes the entire process of design, collection, safe treatment& disposal of septage based on generation of sewage. A comprehensive program that regulates periodic septic tank cleaning, as well as septage transport, treatment, re-use,and disposal is important in the context of our rapidly urbanizing economies.

### 1.1 Current Scenario in Tamil Nadu

Tamil Nadu is one of the most urbanized states in India with around 48.45% (Census 2011) of the population living in urban areas. In terms of Septage Management, Tamil Nadu has accorded highest priority (Vision 2023) to the implementation of Underground Sewerage scheme and waste water treatment plants across local bodies in order to provide better sanitation facilities.

There are 12 Corporations, 124 Municipalities, 528 Town Panchayats and 12808 Panchayats functioning in the state. The implementation of UGSS in erstwhile Chennai Corporation is cent percent covered and out of the 42 ULBs annexed in the process of expansion, only few towns are having sewerage system and others are in proposal stage. With respect of other Municipalities and Corporations, implementation of UGSS scheme is underway in 41 ULB's with financial assistance from Government of India, World Bank assisted TNUDP-III, German Bank assisted KfW, NRCP & NTADCL. Out of these 41 ULBs, UGSS has been so far completed in 20 ULBs with limited coverage. Another 22 UGSS schemes have been announced during 2012-13 of which work is in progress in Ariyalur, Perambalur and Tiruchirapalli to extend UGSS to under-served areas and core areas of Nagercoil.

The ULB wise capacity of the STPs and the present flow received at STPs is given in the table below.

*Table 1 - ULB Wise Capacity of STP's, Present Flow and Percent Utilization*

#	Name of the ULB	Year of Commissioning	Capacity (in MLD)	Technology	Present flow (in MLD)	% Utilization
1	Chennai	-	649.00	ASP	500.00	77.04%
2	Chinnamanur	2012	4.00	ASP	2.00	50.00%
3	Coimbatore	2010	70.00	SBR	25.00	35.71%
4	Dharmapuri	2013	5.00	ASP	0.02	0.40%
5	Dindigul	2012	13.00	ASP	0.50	3.85%
6	Kanchipuram	2012	14.70	WSP	6.00	40.82%
7	Karur	2007	15.00	ASP	6.00	40.00%
8	Kumbakonam	2009	15.00	ASP	7.00	46.67%
9	Madurai (2 Nos)	2011	172.00	SBR	25.00	14.53%
10	Maraimalai Nagar	2010	2.50	EAP	0.50	20.00%

#	Name of the ULB	Year of Commissioning	Capacity (in MLD)	Technology	Present flow (in MLD)	% Utilization
11	Mayiladuthurai	2007	10.83	WSP	6.00	55.40%
12	Namakkal	2012	7.00	ASP	1.20	17.14%
13	Pallavapuram*	2011	0.00	ASP	9.00	0.00%
14	Perambalur	2013	5.00	ASP	1.50	30.00%
15	Ramanathapuram	2013	7.00	ASP	1.00	14.29%
16	Thanjavur	2007	24.00	ASP	8.00	33.33%
17	Thiruvannamalai	2013	8.70	ASP	0.02	0.23%
18	Tirunelveli	2007	28.00	WSP	8.00	28.57%
19	Tiruppur	2008	15.00	ASP	8.00	53.33%
20	Trichirapalli	2007	58.00	WSP	40.00	68.97%
21	Udgamandalam	2000	5.00	ASP	2.00	40.00%
<b>TOTAL</b>			<b>1128.73</b>	<b>-</b>	<b>656.74</b>	

\* (linked with CMWSSB STP)

## **1.2 The Need for Decentralized Septage Management system in Tamil Nadu**

Even as cities create more underground sewerage infrastructure, the septic tank often remains an integral component of the sewerage scheme. So far, only 35% of Tamil Nadu's urban population is covered by UGSS. Many **local bodies do not have the capacity** to create and manage assets for treatment of liquid waste as these involve **large investment and long gestation** periods. On the other side, there are reports of **underutilization of existing STPs**, and disposal of **untreated waste into fresh water bodies**. As per Census 2011, 55% of the population continues to dispose waste into **septic tanks, many of which are not designed properly**, and hence sewage does not get treated effectively resulting in fecal contamination.

Presently many institutions, commercial establishments and high rise buildings and even households may let the sewage water into storm water drains illegally and regulators are not able to make these offenders to comply. In areas un-served by sewer systems, there is dumping of sewage collected in underground tanks into water bodies in and around cities. Tankers employed for disposing the sewage may dump the sewage at the closest point from where it was collected.

There is a felt need for framing guidelines for regulation of collection, provision for treatment and safe disposal of septage. This document details out these guidelines.

## **2. Operative Guidelines for Local Bodies for effective implementation of Septage Management**

Septage Management for the local bodies includes both residential and non-residential / commercial waste (excluding industrial waste). These Operative Guidelines for septage management seek to empower the local bodies with knowledge, procedures and facilities.

### *Box 1 Key Elements of Septage Management*

The key elements of Septage Management are:

- I. Design and Construction of Septic Tanks
- II. Septic Tank Pumping & De-Sludging
- III. Septage Transportation
- IV. Treatment & Septage Disposal
- V. Fees/Charges for Collection, Transportation and Treatment
- VI. Information, Education and Communication
- VII. Record-keeping and Reporting (MIS)

21 clusters of Local Bodies have been identified based on the existing location of STPs. The local bodies have been grouped in such a way that all collections points are situated at around 18-20 kms of radius of the chosen STP. The clusters have been given in the Annexure. These clusters can be revised as new STPs made under the ongoing Underground Sewerage Schemes are taken into service.

**The Operative Guidelines for each of these key elements are as follows.**

### **I. Design and Construction of Septic Tanks**

- a) **Evaluate existing septic tank designs** and other storage/treatment systems and modify (in case of variation) based on design given in Annexure 1.
- b) Issue notice to owners of septic tanks that do not meet the standard septic tank design under Tamil Nadu Public Health Act, 1939

- c) Identify **insanitary latrines<sup>1</sup>** and convert them to **sanitary latrines** for safe collection and disposal of waste

## **II. Pumping and De-Sludging**

- a) **Conduct Periodic and routine De-Sludging** based on capacity of septic tank.
- b) **Collection system for cluster Local Bodies:**Wherever sewage is currently discharged into fresh water or storm water drains, Local Bodies to ensure proper collection (transportation) system, and treatment of septage at the nearest STP and safe disposal.

## **III. Septage Transportation**

- a) **Local body clusters** have been identified for treatment of collected septage at earmarked STP locations. All Septage Transportation Vehicles should be directed to transport septage to their designated STP as given in Annexure 2.
- b) **Only certified and licensed Septage Transporters to de-sludge and transport waste to the designated STP.** The transporters should be selected in accordance with The Tamil Nadu Transparency in Tenders Act, 1998, as per the terms and conditions detailed in Annexure 3 and Annexure 4.
- c) Septage Transportation Vehicle Operators involved in the process of collection, treatment and disposal of sewage should be well trained and equipped with protective safety gears, uniforms, tools and proper vacuum trucks, to ensure safe handling of sewage. The rules under the Prohibition of Employment as Manual Scavengers and their Rehabilitation Act, 2013 provide for a comprehensive list of safety gear that should be used.

## **IV. Treatment & Final Disposal**

- a) **Design of Decantation Facility:** Decantation facility should be designed based on expected volumes of septage generated in local body clusters with adequate capacity for the next five years based on urbanization trend in the cluster. The design of a typical Septage Receiving / Decanting Facility is provided in the Annexure 7.
- b) **Quality Check:** Input quality of the collected septage should be tested at the decant facility for presence of any metal or traces of industrial waste.

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<sup>1</sup> Insanitary Latrines in households are those where night soil is removed by human, serviced by animals or/and night soil is disposed into open drain or pit into which the excreta is discharged or flushed out, before the excreta fully decomposes.

The septage receiving facility should be operational during working hours only and a responsible person should be appointed in the facility to ensure that no commercial or industrial waste is unloaded through these facilities.

## **V. Information, Education and Communication**

- a) **IEC for Municipal staff:** Municipal Commissioners, Engineers, Sanitary Inspectors, Health Officers, and Sanitary Workers should be well trained in safe septage management and its best practices. This involves regular training sessions on safe collection, treatment and disposal. Information regarding standard septic tank design, the need for periodic inspection and De-Sludging of sewage, design of a decant facility, tender details for engaging licensed transporters, etc. should be disseminated widely to achieve a safe septage management system. Training should also be provided on safety standards. In this regard, CMWSSB and CMA will design the course material and draft a calendar for training to ensure complete coverage before December 2014.
- b) **IEC for Residents:** Members of Resident Welfare Associations, community organizers, self help groups and the general public should be sensitized periodically regarding the need for a sound septage management system. The health hazards associated with improper collection and treatment of waste, and the ill-effects of sewage discharge into fresh water/storm water drains should be clearly explained to the residents. CMA will produce sample IEC material and also draft a campaign for residents.
- c) **IEC for Septage Transporters / Private Vendors:** Local Bodies should ensure all safety norms are clearly explained to the septage transporters. Private Operators and Transporters should be well trained in safe collection and transportation of sewage including vehicle design, process of de-Sludging, safety gears and safe disposal at the nearest STP. CMWSSB and CMA will draft tentative training calendar for septage transporters / private vendors.

## **VI. Fees/Charges for De-Sludging, Transportation and Treatment**

- a) Fees for De-Sludging to be collected from residents by the certified / licensed tanker operators.
- b) Transport charges should be determined based on market rates while ensuring that residents are not exploited by the tanker operators.
- c) For treatment, the on-going rate of Rs. 150-200 can be charged for 9000 litres of waste collected. Periodic revisions for the charges to be effected based on revisions in costs involved.



## VII. Record Keeping and Reporting through MIS

- a) **Management Information Systems (MIS):** Information related to septage generation from residents and commercial establishments needs to be collected by the Local Bodies. Household level details of insanitary latrines, identification of septic tank location, Operator in-charge for each location, Vehicle Details, Name & Location of STP earmarked for disposal of septage, and decant facility details should be duly collected by all Local Bodies.
  
- b) **Geographical Information System (GIS):** GIS can be used to be plan the **route of septage vehicles** and tracking these for regular record keeping. **Public Grievance Redressal** to also form part of ORFDO\_ERGLHV record keeping. Helpline numbers to be also shared with residents.

### 3. Deliverables for the Local Bodies in the next six months effective from June 2014

Table 2 Activities to be undertaken by Urban Local Bodies for Septage Management

Key Elements of Septage Management	Objectives and Outcomes	Activity to be undertaken by Local Bodies	Timeframe	Means of Verification
<b>1. Design and Construction of Septic Tanks</b>	To ensure all septic tanks are constructed as per standard design and all insanitary latrines are converted to sanitary ones.  To ensure that proper design is submitted at time of building plan approval process.	<ul style="list-style-type: none"> <li>• <b>Evaluate existing septic tank designs</b> and other storage/treatment systems and identify cases where septic tank is not constructed as per design. Initial evaluation may be outsourced.</li> </ul>	2 months	Records at Local Body of all septic tanks
		<ul style="list-style-type: none"> <li>• <b>Modify septic tank</b> (in case of variation) based on design given in <a href="#">Annexure 1</a></li> </ul>	3 months	Submit correction report to Municipal Commissioner
		<ul style="list-style-type: none"> <li>• <b>Issue notice</b> for septic tanks that do not meet the standard septic tank design as per Tamil Nadu Public Health Act, 1939</li> </ul>	1 month	Record of notice issued
		<ul style="list-style-type: none"> <li>• Identify <b>insanitary latrines and convert to sanitary latrines</b> for safe collection and disposal of waste</li> </ul>	2 months	Record of all insanitary latrines and progress of conversion
<b>2. Pumping and De-Sludging</b>	Periodic and safe collection of all sewage generated in the Local Body by residential and commercial establishments	<ul style="list-style-type: none"> <li>• Identify locations where sewage is getting mixed with water bodies or storm water drains and organize collection at designated points.</li> <li>• Create facility to collect sullage water</li> </ul>	1 month	Survey sheet as per Annexure 5 to be maintained along with progress report

Key Elements of Septage Management	Objectives and Outcomes	Activity to be undertaken by Local Bodies	Timeframe	Means of Verification
<b>3. Septage Transportation</b>	Safe transportation of sewage by licensed septage transporters in vacuum trucks and safety gears for all staff	<ul style="list-style-type: none"> <li>• Call for Expression of Interest</li> <li>• Grant licenses (valid for 6 months at a time) for transporting sewage on rate contract basis based on permit licenses given in the Annexure 3 &amp; 4.</li> <li>• Payments to be made directly to the Transporter.</li> <li>• Regional Transport Offices may be contacted for gaining information on vehicles registered</li> </ul>	3 months	Tender details, details of selected septage transporters
		<ul style="list-style-type: none"> <li>• Ensure proper vacuum trucks are transporting sewage with staff adequately equipped with safety gears and other protective equipment required to safely collect and transport sewage</li> </ul>	3 months	Vehicle details to be kept with the local bodies
		<ul style="list-style-type: none"> <li>• Ensure collection efficiency is increased by 10% of the collectable sullage in every 6 months compared to latest figures reported by Local Bodies.</li> </ul>	Every 6 months	Maintain records for proof of increase
		<ul style="list-style-type: none"> <li>• As per the clusters given in Annexure 2, organize efficient routes to the designated STPs or Septage Receiving Facility</li> </ul>	3 months	Records of routes Use GIS platform as next phase

Key Elements of Septage Management	Objectives and Outcomes	Activity to be undertaken by Local Bodies	Timeframe	Means of Verification
<b>4. Treatment and Final Disposal</b>	Ensure construction of Decanting Facility / Sewage Receiving Facility at all the STPs. Ensure Safe Treatment of Sewage.	<ul style="list-style-type: none"> <li>Design of Decant Facility should be from the approved list as per CPHEEO norms.</li> <li>Completion of Construction</li> </ul>	3 months	Maintain record of each facility and indicate clearly whether it meets prescribed standards
	Hours of operation of decanting facility to be Working Hours.	<ul style="list-style-type: none"> <li>Input quality of sewage to be tested to ensure source of collected sewage is residential or commercial establishment and not industrial sources. Tests may be carried out at the Laboratories maintained within the STP</li> </ul>	Every 3 months	Submit test reports periodically
	Ensure Increase in Capacity Utilized.	<ul style="list-style-type: none"> <li>Increase utilization of STP by 10% every 6 months until the STP is utilized to its full capacity.</li> </ul>	Every 6 months	Maintain records for increase
		<ul style="list-style-type: none"> <li>Appoint a qualified person on outsourcing basis for monitoring and record keeping.</li> </ul>	6 months	
<b>5. IEC Activity</b>	All stakeholders in the septage management system including residents, civic bodies, personnel handling sewage, municipal officials to be given periodical training on safe and best practices in septage management. The importance of safe collection, treatment and disposal of	<ul style="list-style-type: none"> <li><b>Ensure one training session every 3 months to Local Body staff</b> on safe collection, treatment and disposal.</li> <li>Information regarding standard septic tank design, design of a decant facility, tender details for engaging licensed septage transporters, etc. should be disseminated widely to achieve a safe septage</li> </ul>	2 Months	Certification by TNIUS.

Key Elements of Septage Management	Objectives and Outcomes	Activity to be undertaken by Local Bodies	Timeframe	Means of Verification
	sewage and the health hazards resulting from improper sewage treatment should be explained clearly to all.	<p>management system. Commissioner of Municipal Administration to arrange for the training</p> <ul style="list-style-type: none"> <li>• <b>Ensure monthly engagement with Residents</b> including Resident Welfare Associations, community organizers, self-help groups.</li> <li>• The general public should be sensitized regarding the need for a sound septage management system. The health hazards should be clearly explained to the residents.</li> <li>• Residents should also be informed about the standard designs for septic tanks.</li> </ul>	2 Months	Photographs and Video of the campaign.
		<ul style="list-style-type: none"> <li>• <b>Local Bodies to organize orientation session for Septage Transporters / Private Vendors:</b> Local Bodies should ensure all safety norms are clearly explained to the transporters. Private Operators should be well trained in safe collection and transportation of sewage including vehicle design, process of de-sludging, safety gears and safe disposal at the nearest STP.</li> </ul>	2 Months	Photographs and Video of

Key Elements of Septage Management	Objectives and Outcomes	Activity to be undertaken by Local Bodies	Timeframe	Means of Verification
6. Record Keeping		<b>Local Bodies</b> to have proper records and registers of licensed transporters, septic tank locations, De-Sludging activities, household level details, etc.	1 month	Records and registers

## Annexure 1: Septic Tank Design

Depending on the geography, soil condition, water seepage capacity of the soil the design can be prepared and approved by the Local Bodies. Proper septic tank design considers the following factors:

- Sized properly with appropriate **sludge detention time, volume and hydraulic retention time<sup>2</sup>**
- **Proper inlet and outlet** structures
- At least **one baffle** separating the tank into multiple compartments
- **Water tight**
- **Access port for each compartment** that allows for inspection and pumping

*Table: Recommended sizes of Septic Tank upto 20 users*

No. of Users	Length(M)	Breadth(M)	Liquid Depth (Cleaning interval of)	
			2 Years	3 Years
5	1.50	0.75	1.00	1.05
10	2.00	0.90	1.00	1.40
15	2.00	0.90	1.30	2.00
20	2.30	1.10	1.30	1.80
50	5.00	2.00	1.00	1.24
100	7.50	2.65	1.00	1.24
150	10.00	3.00	1.00	1.24
200	12.00	3.30	1.00	1.24
300	15.00	4.00	1.00	1.24

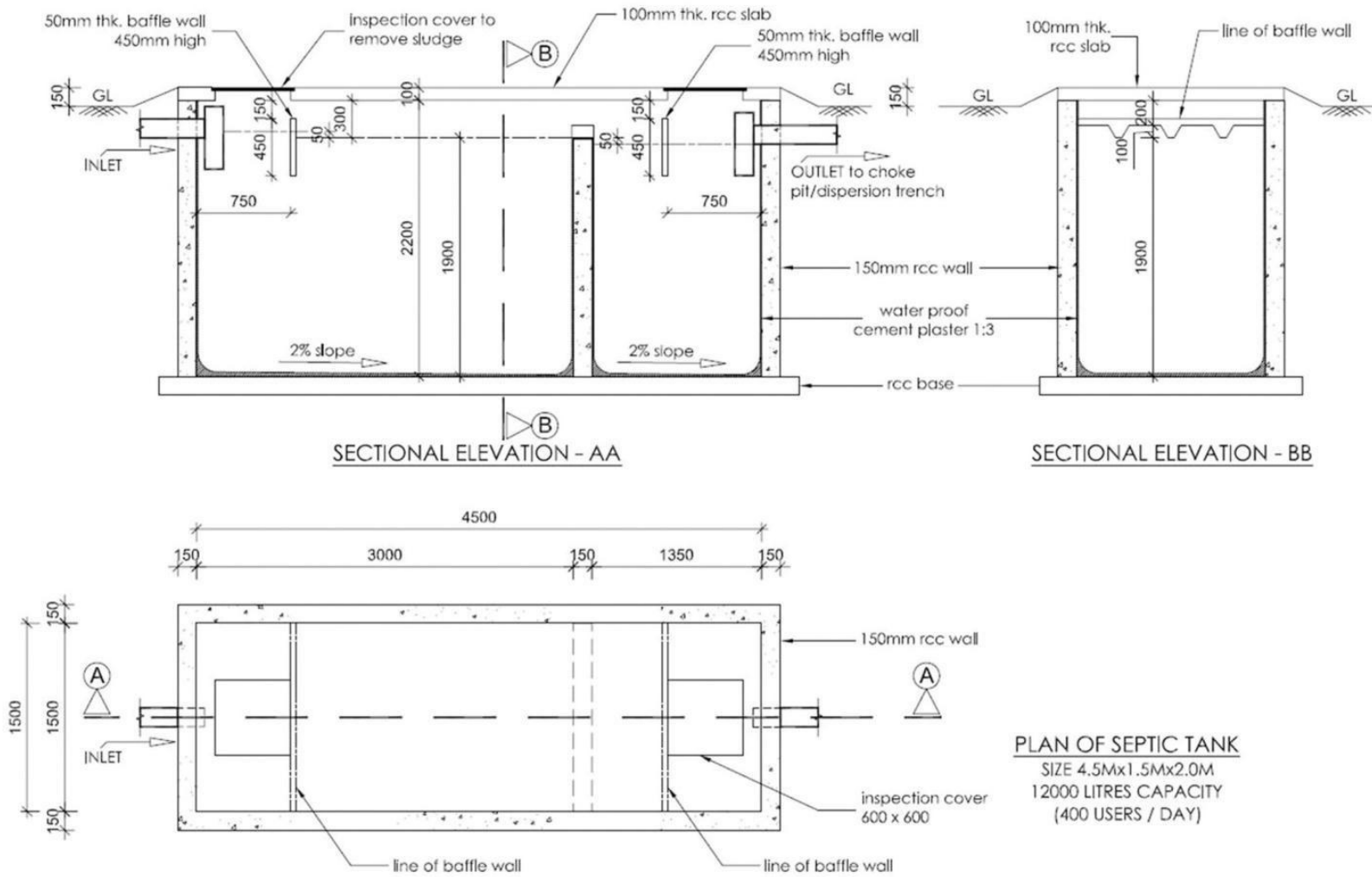
### Notes

1. A provision of 300 mm should be made for free board.
2. The sizes of septic tank are based on certain assumption on peak discharges, as estimated in IS: 2470 (Part -1) - 1985 and while choosing the size of septic tank exact calculations shall be made.
3. For population over 100, the tank may be divided into independent parallel chambers of maintenance and cleaning.

**Source: CPHEEO manual on sewerage and Sewage treatment (Second Edition)**

<sup>2</sup> Hydraulic retention time is the volume of the aeration tank divided by the influent flow-rate. HRT is usually expressed in hours (or sometimes days).

Figure: Sample Septic Tank Design





## Annexure 2: Clusters

### Existing STP's and Nearby Town Panchayats and Panchayat Union

#	Name of the Municipality	Nearest Town Panchayats	Panchayat Unions
1	Chennai Corporation (7 No's)	Minjur, Thiruinravur, Thirumazisai, Naravarikumpam, Thiruneermalai, Chitlapakkam	
2	Chinnamanur	Kuchanur, Markeyenkottai	Chinnamanur
3	Coimbatore	Sarkar Samakulam, Vedapatty, Perur, Vellalur, Irugur	Periyanaickenpalayam, Sarkarsamakulam, Thondamuthur, Sular
4	Dharmapuri	Papparapatti	Dharmapuri
5	Dindigul	Thadikombu, Agaram	Dindigul, Athoor, Reddiarchattiram, Shanarpatti, Vedasandur, Vadamadurai
6	Kancheepuram	Walajabad	Kancheepuram, Walajabad, Uthiramerur
7	Karur	Puliyur	Karur, Thanthoni
8	Kumbakonam	Thirunageswaram, Swamimalai, Dharasuram	Kumbakonam
9	Madurai	Paravai	Madurai East, Madurai West, Thiruparankundram
10	Maraimalinagar	N.Guduvancherry	Kattankolattur
11	Myladuthurai	Kuthalam, Vaitheeswarankoil	Mayiladuthurai, Kuthalam, Sembanarkoil
12	Namkkal	Sendamangalam	Elaichipalayam, Erumaipatti, Mohanur, Namakkal, Puduchatram, Paramathi, Senthamangalam
13	Pallavaram	Thiruneermalai, Peerkankarani, Perungulathur, Chitlapakkam	St. Thomas Mount
14	Perambalur	Kurumbalur	Perambalur
15	Ramanathapuram	Nil	Ramanathapuram
16	Thanjavur	Thiruvaiyaru, Vallam	Thanjavur, Thiruvaiyaru, Orathanadu, Ammapettai, Kumbakonam, Thiruvudaimarudur, Papanasam
17	Thiruvannamalai	Nil	Tiruvannamalai, Thuringapuram, Thandrampet
18	Tirunelveli	Sankar Nagar, Naranamalpuram, Melasheval, Gopallasamudram	Palayamkottai
19	Tiruppur	Thirumurganpoondi	Uthukuli, Avinashi, Palladam, Pongalur, Thiruppur
20	Trichy	Kuthapur	Andanallur, Manikandam, Thiruverambur, Manachanallur
21	Udagamandalam	Kethi, Jagathala	Udagamandalam

### **Annexure 3: Sample Septage Transporter Permit**

#### **Septage Transporter Permit for XXX Municipality**

In accordance with all the terms and conditions of the current ..... Municipality's Rates, Rules and Regulations, the special permit conditions accompanying this permit, and all applicable rules, laws or regulations of Government of Tamil Nadu, permission is hereby granted to:

NAME OF PERMITTEE: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

For the disposal of septage from domestic septic tank or commercial holding tank at the \_\_\_\_\_ STP.

This Permit is based on information provided in the **Septage Transporter Permit** application which constitute the Septage Management Hauled Permit.

This Permit is effective for the period set forth below, may be suspended or revoked for Permit Condition Non Compliance and is not transferable. The original permit shall be kept on file in the Permittee's office. A copy of this Permit shall be carried in every registered vehicle used by the permittee.

EFFECTIVE DATE:

EXPIRATION DATE:

CHECK IF RENEWED PERMIT

Permit is liable to be cancelled in case of violations of any Acts, Rules and Regulations relating to the operation of Septage System or in cases of safety protocols not being adhered to or in case of non permitted disposals.

## Annexure 4: Collection and Transport Records

### **Sample Form to be filled by Operator / Transporter of Septage**

**i. Identification of Waste:**

- a) Volume
- b) Type: \_\_\_\_ Septic Tank \_\_\_\_ Others
- c) Source: \_\_\_\_ Residential \_\_\_\_ Commercial \_\_\_\_ Restaurant \_\_\_\_ Portable Toilet  
\_\_\_\_ Others

**ii. Details of Waste Generator**

- a) Name
- b) Phone Number
- c) Address
- d) Pin

The undersigned being duly authorized does hereby certify to the accuracy of the source and type of wastewater collected and transported.

Date: \_\_\_\_\_ Signature: \_\_\_\_\_

**iii. Details of Transporter / Operator**

- a) Company Name
- b) Permit #
- c) Vehicle License #
- d) Pump out date

The above described wastewater was picked up and hauled by me to the disposal facility name below and was discharged. I certify that the foregoing is true and correct:

**e) Signature of authorized agent and title:** \_\_\_\_\_

The above transporter delivered the described wastewater to this disposal facility and it was accepted.

Disposal date: \_\_\_\_\_ Amount Collected from Transporter: \_\_\_\_\_

Signature of authorized signatory and title: \_\_\_\_\_

NOTE: SUBJECT TO THE TERMS AND CONDITIONS OF \_\_\_\_\_ MUNICIPALITY.

## **Annexure 5: Sample Survey for Identifying Locations of Sullage Water**

This survey may be carried over a period of 7 days to observe the general trend of sullage water being discarded in the open.

Municipality / Corporation Name:

Location Details:

Approximate Quantity of Sullage

Date: - - 2014 / Monday : KL

Date: - - 2014 / Tuesday : KL

Date: - - 2014 / Wednesday : KL

Date: - - 2014 / Thursday : KL

Date: - - 2014 / Friday : KL

Date: - - 2014 / Saturday : KL

Date: - - 2014 / Sunday : KL

Average Sullage Generated Per Day (Sum of the above divided by 7):

Comment on the Method of Observation:

**Annexure 6: Sample House Hold Survey for Identifying Septic Tanks, etc.**

This is a sample plan for a household survey that can be conducted for Septic Tanks. This form may be considered by ULBs and may be expanded to add new fields.

Municipality / Corporation Name:

Property Details: [These details can be readily obtained from the Property Tax Register of the ULB]

No. of Bedrooms in the Household:

Actual Number of People Living in the Household:

Does the Household have a Water Connection:

Septic Tank Details:

Capacity as Per Plan: [Can be gained from the ULB records]

Actual Capacity:

Location of Septic Tank: Front of House Entrance / Back of House

Can a Septic Tank Cleaning Truck easily reach the tank outlet:

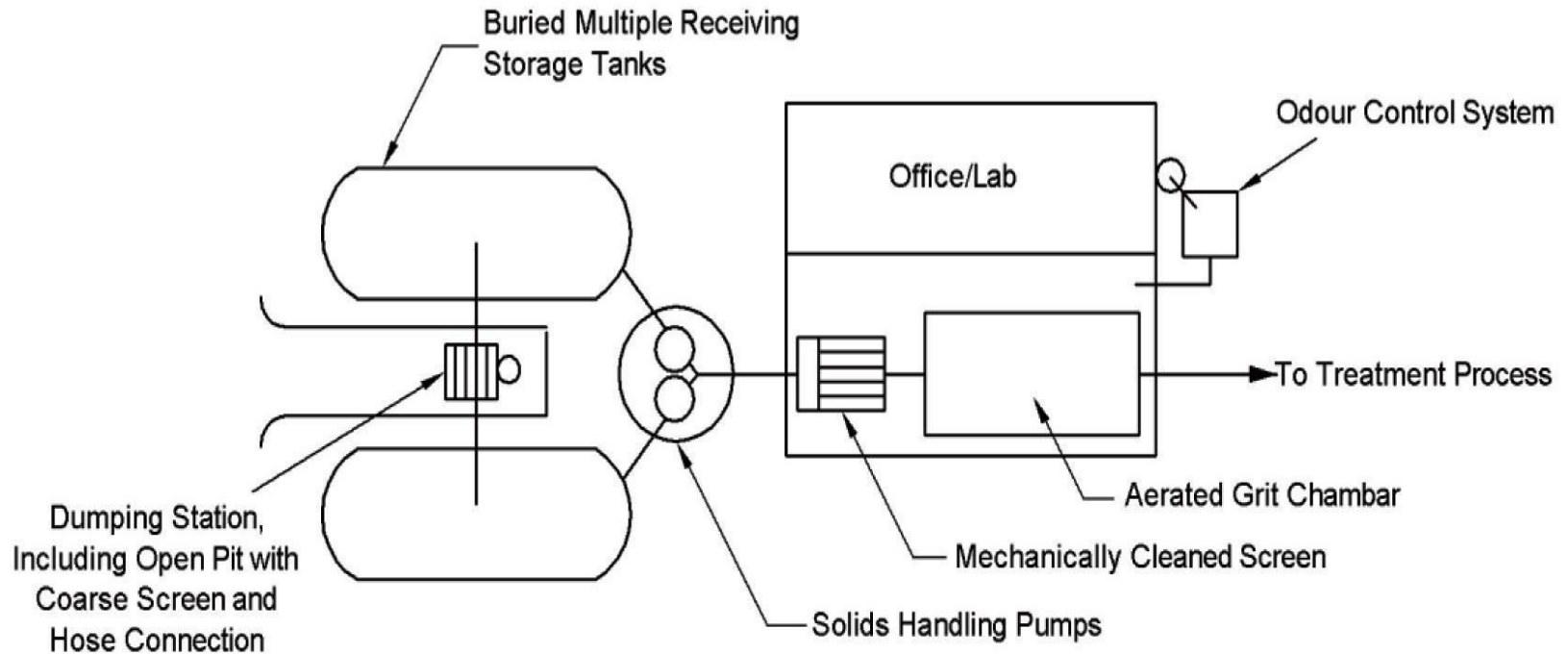
Cleaning Frequency: Every 6 months / Every Year / Every 2 Years / Never

Who is contacted to Provide Septic Tank Cleaning Services: (Name of Agent / Tank Operator, etc.)

Is waste water let out in the open (Yes / No)

## Annexure 7: Decant Facility Design

Figure: Sample Septage Receiving Facility



//TRUE COPY//

**K. PHANINDRA REDDY**  
**PRINCIPAL SECRETARY TO GOVERNMENT COPY//**

*N. Shaija*  
*2.9.2014*  
**SECTION OFFICER.**